

REMARKS

Claims 1, 3-26 are pending. Claims 27-32 and 34 are cancelled with this response. Reconsideration of the application is respectfully requested based on the following remarks.

I. REJECTION OF CLAIMS 1, 3, 4, 6, 9-21, 23, 26-32 and 34 UNDER 35 U.S.C. § 103(a)

Claims 1, 3, 4, 6, 9-21, 23, 26-32 and 34 were rejected under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent No. 7,142,671 (Qi et al.) in view of Anand U.S. Patent No. 7,280,657. Withdrawal of the rejection is respectfully requested for at least the following reasons.

- i. Neither Qi et al. nor Anand teach the cipher output of the eight cipher blocks feedback coupled to the second input of the data input multiplexer and to the first input of a pre-data output multiplexer, as recited in claims 1 and 19.*

Claims 1 and 19 are directed to a security processing circuit that comprises a DES engine. The DES engine further comprises eight cipher blocks operable to output first and second results of a sequential eight step cipher process during a first and second eight step cycle of each of the three DES processing operations. The cipher output of the eight cipher blocks is ***feedback coupled to the second input of the data input multiplexer and to the first input of a pre-data output multiplexer*** to facilitate the 3DES processing. Neither Qi et al. nor Anand teach this structural feature.

By contrast, Qi et al. teach, a feedback timing critical path 451 which feeds only right side cipher data back to an input mux 409 without any such additional structural interconnection directly to a pre-data output mux, as shown in Figs. 4A and 4B. Rather, feedback path 451 only connects a Right last round register 435 to an input mux 409. In addition, no pre-data output multiplexer to receive the cipher results is

provided in neither Qi et al. nor Anand as claimed. Therefore neither Qi et al. nor Anand teach the invention of claim 1 and 19.

Accordingly, withdrawal of the rejection is respectfully requested.

II. REJECTION OF CLAIMS 5, 7, 8, 22, 24 and 25 UNDER 35 U.S.C. § 103(a)

Claims 5, 7, 8, 22, 24 and 25 were rejected under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent No. 7,142,671 (Qi et al.) in view of Anand (U.S. Patent No. 7,280,657) and in view of Callum (US Patent No. 6, 985,581). Withdrawal of the rejection is respectfully requested for at least the following reasons.

As indicated above, Claims 1 and 19 are taught by neither Qi et al. nor Anand. Claims 5, 7 and 8 depend from independent claim 1 and claims 22, 24 and 25 depend from claim 19, which are believed to be allowable over Qi et al. and Anand for, at least, the foregoing reasons. The addition of Callum fails to make up for the aforementioned deficiencies of Qi et al. and Anand with regard to independent claim 1, and thus claims 5, 7 and 8 are believed to be allowable over the suggested combination. Claims 22, 24 and 25 are thus also believed to be allowable over the suggested combination as they depend from independent claim 19.

Accordingly, withdrawal of the rejection is respectfully requested.

III. PROVISIONAL REJECTION OF CLAIMS 1, 4-9, 11, 13-18, 27-30, 32 AND 34

Claims 1, 4-9, 11, 13-18, 27-30, 32 and 34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting, as being unpatentable over claims 1-6, 11-18 and 23-28 of copending application No. 10/730640. Withdrawal of the rejection is respectfully requested for at least the following reasons.

Based on the arguments presented above, we disagree with the characterization of the present pending claims and the copending claims. However, in the interest of expediency the applicant will be filing a terminal disclaimer. Accordingly, withdrawal of the provisional rejection is respectfully requested.

III. CONCLUSION

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, AMDP782US.

Respectfully submitted,
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